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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/556,131

11/09/2005

Ryuichiro Ebi

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EXAMINER

KALAFUT, STEPHEN J

ART UNIT

PAPER NUMBER

1795

NOTIFICATION DATE

DELIVERY MODE

02/26/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/556,131	Applicant(s) EBI ET AL.	
	Examiner Stephen J. Kalafut	Art Unit 1795	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3 and 4 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,3 and 4 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 November 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>09 Feb 2006</u> . | 6) <input type="checkbox"/> Other: ____. |

Claims 3 and 4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. There is no antecedent for "the sheet-like gasket" in claim 3. Claim 4 is unclear as to whether "a sheet-like gasket" recite in this claim is the same as "the sheet-like gasket" in claim 3, and because the claim recites a "sealing protrusion", but does not recite what member the protrusion is part of.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Murakami *et al.* (JP 7-201308) in view of Suzuki *et al.* (JP 2001-283795), both cited by applicants.

Murakami *et al.* disclose a sealing plate used to seal a battery, which plate includes a sealing member (3) that seals an opening via an insulating gasket (4), and a sheet-like gasket (9) placed on the outer periphery of the sealing member. These parts are held together by the crimping of an outer member (6). The sheet-like gasket, called a "film", is more resistant to heat generated by an adjoining PTC member (8) than the other gasket. This would mean that the sheet-like gasket would have a higher coefficient of rebound resilience than the other gasket. This claim differs in that it recites that a battery case is the crimped member that is tightly sealed by the sealing member and gaskets. Suzuki *et al.* discloses a battery with a case (8) that forms

Art Unit: 1795

the outermost part of a crimped sealing structure that includes a sealing body (1) and a gasket (7). Because this arrangement would simplify construction, eliminating the need for a separate crimping member, it would be obvious to use the sealing member and gaskets of Murakami *et al.* with the battery case of Suzuki *et al.* to form a crimped battery seal.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Murakami *et al.* in view of Suzuki *et al.* as applied to claim 1, and further in view of Yamazaki *et al.* (JP 2003-7270), cited by applicants.

The above combination does not disclose an upper face of the gasket being made larger. Yamazaki *et al.* discloses a crimped seal for a battery that includes a gasket (133) having a thicker, and thus larger, section (134) on the upper part of its face. Because this arrangement reduces the likelihood of cracks in the casing, and increases sealing ability (abstract, lines 1-3), it would be obvious to use modify the sealing gasket of Murakami *et al.* to include the enlarged section of Yamazaki *et al.* on its upper face, along with the casing of Suzuki *et al.*

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Murakami *et al.* in view of Suzuki *et al.* and Yamazaki *et al.* as applied to claim 3 above, and further in view of Masumoto *et al.* (JP 2000-357495), cited by applicants.

This claim, to the extent that it is understood, differs from the above combination by reciting an annular sealing protrusion at a compressed point, with a sheet-like gasket placed thereon. Masumoto *et al.* discloses a protrusion on the sealing member (10), crimped with a gasket (11) by a battery casing (1), and a protrusion (14) on the gasket. Because these help to

Art Unit: 1795

prevent leakage of electrolyte without deformation (abstract, lines 1-7), it would be obvious to modify the sealing member and gasket of Murakami *et al.* to include the protrusions disclosed by Masumoto *et al.*, along with the casing of Suzuki *et al.* and enlarged section of Yamazaki *et al.* on the gasket of Murakami *et al.* The sheet-like gasket of Murakami *et al.*, which has a higher coefficient of rebound resilience than the gasket, would contact the protrusions on the sealing member, since they would be located in its outer periphery.

The disclosure is objected to because of the following informalities: Figures 6 and 7 should be labeled "Prior Art". Drawing numerals 5 and 14a have not been identified in the specification. Appropriate correction is required.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kühl *et al.* (US 4,309,493) disclose a cylindrical battery cell sealed with a gasket.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen J. Kalafut whose telephone number is 571-272-1286. The examiner can normally be reached on Mon-Fri 8:00 am-4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick J. Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1795

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Stephen J. Kalafut/
Primary Examiner, Art Unit 1795